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(71) Applicant:  
**Johnson & Johnson Professional, Inc.**  
**Raynham, Massachusetts 02767-0350 (US)**

(72) Inventors:  
 • Eng, Lianne  
**North Attleboro, Massachusetts 02760 (US)**  
 • Collieran, Dennis  
**Plainville, Massachusetts 02767 (US)**  
 • Slamin, John  
**Wrentham, Massachusetts 02093 (US)**

(74) Representative:  
**Fisher, Adrian John**  
**CARPMAELS & RANSFORD**  
**43 Bloomsbury Square**  
**London WC1A 2RA (GB)**

(54) **Femoral ligament tensing and prosthesis sizing device**

(57) A tool for preparing a bone end for prosthetic joint replacement. The tool rests on a resected end of one bone of an articulating joint set, and includes a jack assembly for supporting an opposing bone of the set in flexion while the bone ends remain attached together by ligaments. The jack pivotally supports the opposing bone and raises it to the spacing of the intended prosthesis to allow the surgeon to balance soft tissue tension. This support allows the bone to rotate under the tension of the connecting ligaments, into natural alignment while a template carried by the jack assembly lies against the prepared end, so subsequent cuts are in correct rotational alignment and the bone enjoys a natural posture when the joint components are attached. Preferably, a sizing jig in the tool contacts the bone to determine an offset, and a positioning block coupled to the sizing jig confirms the size, and positions drill holes on the bone surface contacted by the jig to set the orientation for attaching a cutting block. The sizing jig may include a template for indicating the size of a required joint component, and the jack may support the bone on an intramedullary rod. In one embodiment, the jack moves a gimballed assembly which fits about the intramedullary rod, allowing the template to rest flat against the resected bone end. Preferably, the device places drill holes in position for a cutting block to fit a femoral end component of a prosthetic knee.

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# EUROPEAN SEARCH REPORT

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EP 99 30 6323

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			A61B
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>26 April 2000</b>	Examiner <b>Verelst, P</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p>			

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